

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application:

1-18. (canceled)

19. (Currently Amended) A cured pneumatic tyre, comprising:

at least one temperature indicator;

wherein the at least one temperature indicator comprises:

at least one reactive substance; and

at least one dye substance;

wherein the at least one reactive substance has a threshold temperature,

wherein the at least one dye substance has at least one characteristic peak in its absorption or emission spectrum,

wherein, when an excess temperature is reached in the cured pneumatic tyre, the at least one reactive substance is heated above the threshold temperature and reacts with the at least one dye substance so as to modify the at least one characteristic peak.

20. (Currently Amended) The cured pneumatic tyre of claim 19, comprising: at least two temperature indicators.

21. (Currently Amended) The cured pneumatic tyre of claim 20, wherein the at least two temperature indicators comprise different reactive substances with different threshold temperatures.

22. (Currently Amended) The cured pneumatic tyre of claim 20, wherein the at least two temperature indicators are positioned in axial sequence between a crown shoulder and an equatorial plane of the tyre.

23. (Currently Amended) The cured pneumatic tyre of claim 19, wherein the at least one dye substance comprises a carbonyl dye.

24. (Currently Amended) The cured pneumatic tyre of claim 19, wherein the at least one reactive substance comprises a radical initiator.

25. (Currently Amended) The cured pneumatic tyre of claim 24, wherein the radical initiator is a peroxide.

26. (Currently Amended) The cured pneumatic tyre of claim 24, wherein the radical initiator is paramethyl benzoyl peroxide.

27. (Currently Amended) The cured pneumatic tyre of claim 24, wherein a molar ratio of the radical initiator to the at least one dye substance is greater than or equal to about 50:1 and less than or equal to about 150:1.

28. (Currently Amended) The cured pneumatic tyre of claim 24, wherein a molar ratio of the radical initiator to the at least one dye substance is greater than or equal to about 90:1 and less than or equal to about 120:1.

29. (Currently Amended) The cured pneumatic tyre of claim 19, wherein the at least one temperature indicator comprises an opaque medium.

30. (Currently Amended) The cured pneumatic tyre of claim 29, wherein the opaque medium comprises one or more of titanium dioxide, calcium carbonate, silica, and sodium sulfate.

31. (Currently Amended) The cured pneumatic tyre of claim 19, wherein the at least one temperature indicator comprises a binding material.

32. (Currently Amended) The cured pneumatic tyre of claim 31, wherein the binding material is a cross-linkable material.

33. (Currently Amended) The cured pneumatic tyre of claim 31, wherein the binding material comprises low-temperature-vulcanizing properties.

34. (Currently Amended) The cured pneumatic tyre of claim 31, wherein the binding material comprises low-temperature-polymerizing properties.

35. (Currently Amended) The cured pneumatic tyre of claim 31, wherein the binding material comprises (C1-8)alkyl-cyano-acrylates.
36. (Currently Amended) The cured pneumatic tyre of claim 19, wherein the at least one temperature indicator is coated by a binding material.
37. (Currently Amended) The cured pneumatic tyre of claim 36, wherein the binding material is a cross-linkable material.
38. (Currently Amended) The cured pneumatic tyre of claim 36, wherein the binding material comprises low-temperature-vulcanizing properties.
39. (Currently Amended) The cured pneumatic tyre of claim 36, wherein the binding material comprises low-temperature-polymerizing properties.
40. (Currently Amended) The cured pneumatic tyre of claim 36, wherein the binding material comprises (C1-8)alkyl-cyano-acrylates.
41. (Currently Amended) The cured pneumatic tyre of claim 19, wherein the at least one temperature indicator is applied on a surface of an adhesive substrate, and wherein the adhesive substrate is then applied onto the tyre.

42. (Currently Amended) A temperature indicator, comprising: at least one reactive substance; and at least one dye substance; wherein the at least one reactive substance has a threshold temperature, wherein the at least one dye substance has at least one characteristic peak in its absorption or emission spectrum, wherein, when an excess temperature is reached in the tyre, the at least one reactive substance is heated above the threshold temperature and chemically reacts with the at least one dye substance so as to modify the at least one characteristic peak.